NEVADA CLIMATE SUMMARY

FOR FEBRUARY 1986

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SYNOPSIS

Record breaking warm temperatures Statewide along with unprecedented rainfall in the western portion of the State, were the highlights of February weather in Nevada. The latter caused flooding, mud slides, and other damage estimated at nearly 17 million dollars, bringing about a Federal declaration of disaster aid to 5 counties - Washoe, Lyon, Douglas, Storey, and Carson City. The heavy precipitation did have its bright side, with seasonal snowpack water content and precipitation totals rising from 75-85% on February 1st to about 150% March 1st, promising ample water supplies for 1986.

Coupled with record breaking warmth during January, the February mildness caused the January-February period to be the warmest first two months of the year on record at many locations throughout the Silver State.

TEMPERATURE

After the warmest January of record in much of Nevada, February almost repeated that, with near record breaking average monthly temperatures. Also, all-time high temperatures for the month were established at several locations during April-like weather conditions at the end of the month. Listed below are some of the new record high temperatures established between February 25th and 28th.

Station	Temperature	Old Record - Date		Records Began
Winnemucca	74°	72°	1977	1977
Austin	70	67	1951	1887
Hawthorne	78	78	1970	1888
Yerington	75	74	1950	1894
Tonopah	75	68	1963	1902
Orovada	71	69	1950	1911
Lahontan Dam	75	72	1921	1912
Searchlight	81	76	1957	1913
Boulder City*	84	80	1954	1931
Las Vegas	87	82	1954	1937
Ely	67	66	1953	1938
Virginia City	70	63	1971	1951
Denio	76	67	1977	1951

*This is the second month in a row that Boulder City has set a new monthly maximum temperature.

In addition, Reno had 75°, only one degree short of the record established in 1888, the first year of temperature records for that city.

Preliminary data from 40 climate stations Statewide indicate that the mercury rose into the 90's at at least two locations in Southern Nevada. Logandale, in Moapa Valley, had 92°, while Laughlin, on the Colorado River, rose to 93° on the 26th, and had 4 days at 90° or higher. The Logandale temperature was the highest ever recorded in the Moapa Valley during February, breaking the old record of 86° set in 1954. Both the Logandale and Laughlin temperatures represent the first time 90° readings have been officially recorded in Nevada during February.

Departures from normal temperature during February ranged from less than one degree above normal in the Far West (Glenbrook +0.5°), to over 6 degrees above in the Northeast and at Hawthorne.

Despite the record breaking warmth, a cold spell that preceded the heavy rains of mid-month lowered the mercury in the Northeast to -15° at Mtn. City and -23° at Wildhorse Reservoir.

Added to the preceding unusually mild January, the February "heat" brought about the warmest first two months of the year at many sites. A few of those are listed below.

Station	Jan. & Feb. Temps. & Departures from Normal				Record Began
Winnemucca	38.7°	(+8.9)	41.1°	(+5.4)	1877
Austin	39.8	(+10.1)	37.8	(+4.9)	1887
Hawthorne	44.3	(+9.3)	46.3	(+6.5)	1888
Reno	40.3	(+8.1)	42.9	(+5.4)	1888
Elko	32.3	(+7.3)	37.6	(+6.6)	1888
Battle Mtn.	38.3	(+9.6)	40.9	(+6.0)	1891
Boulder City	54.1	(+7.8)	55.9	(+4.3)	1931
Las Vegas	51.7	(+7.1)	55.8	(+5.7)	1937
Ely	34.4	(+10.0)	35.4	(+6.6)	1938

Never before in recorded history has there been so few heating requirements in Nevada during January and February. The record warmth of the normally coldest months of the winter caused heating degree days to be unusually low Statewide. For example, Reno had only 75% of the normal January-February heating degree days. Much the same is the case throughout the State, with 80% at Elko, 65% at Hawthorne and Las Vegas, 72% at Winnemucca, and 78% at Ely.

PRECIPITATION

An unprecedented 9 day wet period, from February 12th through the 20th, of sometimes heavy precipitation accompanied by high freezing levels, caused considerable flooding and other damage in Western Nevada. Historic climate records do not show another period of such prolonged and heavy precipitation. Despite the fact that almost all of the months precipitation occurred during this mid-month period, several locations recorded the wettest February of record. The following table lists some of those locations with new February record precipitation, along with the February 12-20 precipitation totals at a few sample sites.

Location	Feb. Precip.	Old Record	- Year	Feb. 12-20 Total
Carson City	9.87"	6.76"	1938	9.79"
Reno WSFO AP	4.84	3.69	1962	4.62
Reno UNR	6.24	5.18	1904	5.97
Virginia City	7.41	5.14	1894	6.88
Incline	17.09	7.00	1969	15.73
Daggett Pass	18.00	-	-	17.25
Glenbrook	9.77	-	-	9.35
Minden	5.16	-	-	5.14
Yerington	2.36	-	-	1.96
Smith	4.48	-	-	4.42

The February 12-20 precipitation event is even more unusual when totals from it are compared to average annual precipitation. For example, Carson City had 91% of the average annual amount in 9 days! This was also the second wettest of any month since records began in the Capitol City in 1875. Only December 1955, with 10.39", has had more.

While most locations in Western Nevada were receiving more than half their average annual totals in the form of rain during this wet 9 day period, areas above the 7500-8000 foot level in elevation were logging tremendous snowfall. As there are no official daily observation points above 7400 feet, estimates of snowfall in the Nevada portion of the Sierra Nevada have been made from snow survey and automatic weather station data. With this in mind, at least 20 feet of new snow fell above the 8000 foot level between February 12th and 20th, along with 20-30 inches of water content. A snow survey site at 8500 feet on the upper south slopes of Mt. Rose near Incline, measured a 167 inch snowpack on March 1st, an increase of 100 inches since February 1st. The water content of this pack was a tremendous 62 inches! At regular observation sites 7400 foot Daggett Pass had 96 inches of snowfall, Incline (6500') 77 inches, and Glenbrook and Virginia City (6300') 35 inches.

With precipitation between 4 and 6 times normal for February over Far Western Nevada, and 2-4 times normal in the rest of the northern half of the State, there was a dry side to the story. Below normal amounts were measured in a portion of Southern Nevada (e.g. Las Vegas had only .15 inches, or 33% of normal), and at Tonopah, where only .05 inches fell, or less than 10% of normal.

SUNSHINE AND WIND

With the exception of the cloudy, wet Far Western portion of Nevada, sunshine hours were about normal during February. For example, Ely (67%), Winnemucca (52%), and Las Vegas (82%), had the normal amount of sunshine hours, while Reno (54%) was well below the usual 68% registered during February.

It was windier than usual Statewide during February, with Winnemucca having 150%, Reno 138%, Elko 137%, Las Vegas 125%, and Ely 103% of normal. During the early portion of the mid-month wet spell, maximum wind gusts reached over 90 mph near Hawthorne, and between 70 and 80 mph in Truckee Meadows foothill areas around Reno.

John W. James
State Climatologist for Nevada

FEBRUARY 1986
PRELIMINARY NEVADA CLIMATE DATA

LOCATION	ELEV	MAX	MIN	MEAN	DEPART	HIGH	LOW	HEATING DEGREE DAYS BASE=65	DEPART	PRECIP	DEPART	GR. 24 HR	SNOW FALL
NORTHWEST													
CARSON CITY	4650'	51.2	30.6	40.9	+2.9	28TH 74	9TH 9	673	- 83	9.87	+8.39	17TH 2.55	T
DAGGETT PASS	7380	39.1	25.9	32.5	-	27TH 66	9TH 10	-	-	18.00	-	17TH 4.00	96"
DENIO	4158	50.6	31.1	40.9	+4.4	28TH 76	9TH 7	-	-	2.83	+2.12	17TH 1.08	T
DUFERRENA	4800	49.0	26.8	37.9	-	28TH 71	9TH 2	-	-	2.25	-	17TH 1.57	T
FALLON EXP. STATION	3965	56.3	26.8	41.6	+2.7	26TH 71	8TH 7	661	- 87	1.09	+ .59	18TH .35	0"
FALLON NAS	3935	59.0	34.0	46.5	+6.9	28TH 81	9TH 13	-	-	.79	+2.90	13TH .19	T
GERLACH	3800	49.2	33.2	40.2	-	26TH 68	11TH 17	-	-	2.11	-	19TH .67	0"
GLENBROOK	6530	41.9	27.7	34.8	+0.5	26TH 57	9TH 13	839	- 21	9.77	+7.48	17TH 1.97	35"
INCLINE	6525	38.7	25.5	32.1	+0.9	25TH 51	9TH 13	920	-	17.09	+13.48	17TH 2.33	77"
LAHONTAN DAM	4150	56.1	33.5	44.8	-	26TH 75	9TH 15	-	-	2.02	+1.60	13TH .40	-
LOVELOCK	3957	54.1	29.3	41.7	+5.2	28TH 72	9TH 9	650	-148	.65	+ .10	-	-
MINDEN AP	4709	55.0	25.9	40.6	+4.6	28TH 71	9TH 7	686	-126	5.16	+4.18	19TH 1.20	-
OROVADA	4310	50.4	30.5	40.5	+4.7	28TH 71	10TH 11	-	-	2.63	+1.71	17TH .60	1"

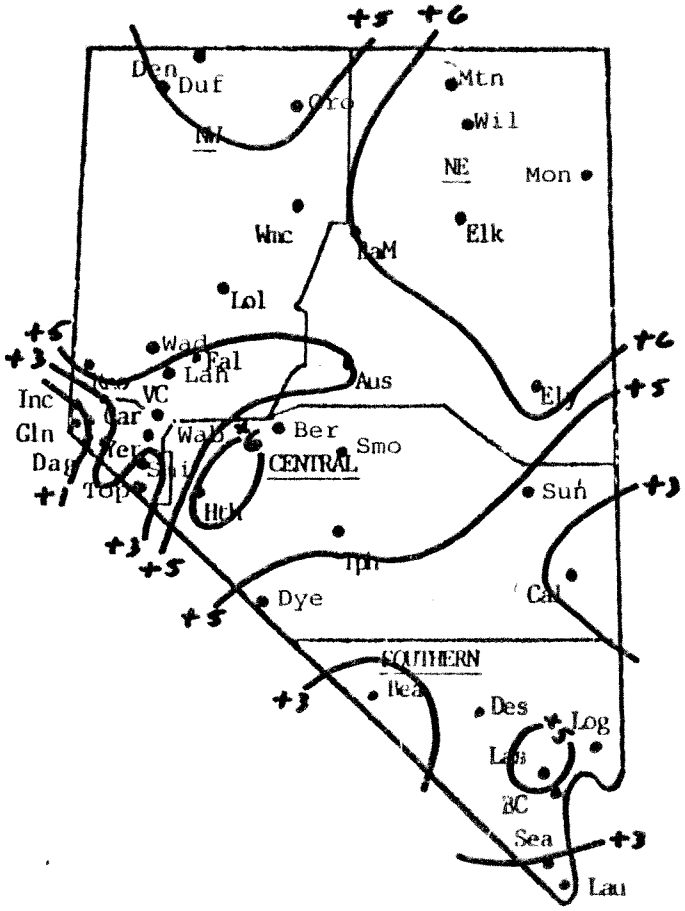
LOCATION	ELEV	MAX	MIN	MEAN	DEPART	HIGH	LOW	HEATING DEGREE DAYS BASE=65	DEPART	PRECIP	DEPART	24 HR	SNOW FALL
RENO WSFO AP	4405'	54.2	31.3	42.8	+5.4	28TH 75	9TH 14	618	-155	4.84	+3.89	19TH 1.45	T
RENO UNR	4550	52.7	33.2	43.0	-	28TH* 72	9TH 15	-	-	6.24	-	19TH 1.87	T
SMITH 6N	5000	54.3	25.5	39.9	+3.5	28TH 73	9TH 3	-	-	4.48	+3.59	18TH 1.26	0"
VIRGINIA CITY	6340	44.9	31.1	38.0	+2.5	28TH 70	8TH 12	722	-104	7.41	+6.22	19TH 1.78	35"
WABUSKA 5SE	4300	54.5	25.9	40.2	-	28TH* 73	9TH 5	-	-	1.19	-	15TH .54	.5"
WADSWORTH	4200	53.9	27.9	40.9	-	28TH 70	11TH* 5	-	-	2.27	-	19TH 1.02	-
WINNEMUCCA	4295	52.2	29.9	41.1	+5.4	28TH 74	9TH 9	665	-155	.86	+ .19	19TH .36	2"
YERINGTON	4375	55.1	30.5	42.8	+4.8	28TH 75	10TH 12	622	-144	2.36	+1.79	19TH .72	1"
NORTHEAST AUSTIN	6605	48.0	27.6	37.8	+4.9	28TH 70	9TH 2	748	-168	1.17	+ .08	-	-
BATTLE MT. AP	4340	52.3	29.5	40.9	+6.0	28TH 72	9TH 5	676	-167	1.98	+1.40	-	-
ELKO	5075	48.4	26.8	37.6	+6.6	28TH 70	9TH 3	759	-193	1.86	+1.05	17TH .74	2"
ELY	6260	46.4	24.4	35.4	+6.6	28TH* 67	10TH* 4	821	-193	.75	+ .07	13TH .26	4.5"
MTN. CITY	5641	-	-	-	-	28TH 65	8TH -15	-	-	4.06	-	- -	-
WILDHORSE RES.	5641	38.7	18.4	28.6	-	27TH 59	9TH -23	-	-	4.30	-	16TH .25	16"

LOCATION	ELEV	MAX	MIN	MEAN	DEPART	HIGH	LOW	HEATING DEGREE DAYS BASE=65	DEPART	PRECIP	DEPART	GR. 24 HR	SNOW FALL
CENTRAL													
CALIENTE	4400'	54.0	27.9	41.2	+2.6	25TH 78	11TH* 10	667	- 72	1.04	+ .26	-	-
DYER 4SE	4975	56.2	26.6	41.4	+4.4	27TH 75	11TH* 6	-	-	.71	+ .28	14TH .35	T
HAWTHORNE	4215	59.1	33.5	46.3	+6.5	28TH 78	10TH 15	524	-276	1.53	+1.05	- -	-
SMOKEY VALLEY	5625	52.7	28.0	40.4	+5.4	28TH 71	10TH 8	-	-	2.05	+1.39	15TH .78	1"
SUNNYSIDE	5300	52.6	25.2	38.9	-	25TH 74	10TH 8	-	-	.95	-	13TH .33	1.5"
TONOPAH AP	5425	53.2	29.5	41.4	+5.5	25TH 75	11TH* 12	664	-151	.05	- .42	-	-
SOUTHERN													
BEATTY	3550	60.2	35.3	47.8	+2.4	25TH 83	10TH 19	486	- 63	1.07	+ .31	15TH .79	0"
BOULDER CITY	2525	65.6	46.2	55.9	+4.3	27TH 84	10TH 28	286	- 96	.97	+ .44	4TH .50	0"
DESERT ROCK	3300	61.9	39.0	50.5	+3.2	26TH 83	10TH 23	404	- 87	.51	- .06	15TH .31	0"
LAS VEGAS	2160	67.1	44.4	55.8	+5.7	26TH 87	10TH 25	270	-147	.15	- .31	15TH .13	0"
LAUGHLIN	550	74.2	46.3	60.3	-	26TH 93	6TH 31	185	-	.63	-	14TH .43	0"
LOGANDALE	1320	70.2	39.8	55.0	-	26TH 92	10TH 23	-	-	.29	-	18TH .25	0"
SEARCHLIGHT	3540	60.4	41.7	51.1	+2.9	26TH* 81	10TH 23	403	- 67	.55	- .18	15TH .41	0"

*LATEST OF MORE THAN ONE OCCURRENCE
NOTE: NORMALS BASED ON 1951-80 PERIOD

DEPARTURE OF MEAN TEMPERATURE
FROM NORMAL (F°)

February 1986



PERCENTAGE OF NORMAL PRECIPITATION

February 1986